

REMARKS

This paper is in response to the non-final Office Action dated March 13, 2007. Applicants have amended the application as set forth above. Specifically, Claims 1-20 have been canceled without prejudice solely to advance the prosecution of the instant application. New Claims 21-40 have been added. Upon the entry of the amendments, Claims 21-40 are pending in this application. No new matter is added by the amendments as discussed below. Applicants respectfully request the entry of the amendments and reconsideration of the application in view of the above amendments and the following remarks.

Support for New Claims

New Claims 21-40 are supported by the specification, claims and drawings as originally filed. More specifically, support for Claims 21-28 can be found, for example, in Figures 6, 7a, 8, 9a and 9b and their description at paragraphs 0118-0137 and 0140-0154. Support for Claims 29-34 can be found, for example, in Figures 6, 7b, 8 and 9c and their description at paragraphs 0118-0144 and 0155-162. Support for Claims 35-40 can be found, for example, in Figures 6, 7a, 7b, 8, 9a, 9b and 9c and their description at paragraphs 0118-162. As such, Applicants respectfully submit that the amendments are fully supported by the application as originally filed and do not constitute the addition of new matter.

Discussion of Drawings Objections

The Examiner objected to the drawings as including discrepancies between the specification and the drawings. Applicants have amended the specification as set forth above. More specifically, the reference numeral "50" has been deleted from the specification at pages 20 and 21, paragraphs 0097 and 0105 of the published application. At page 23, line 12 (paragraph 0108), "FIG. 1" has been changed to "FIG. 4" to make it consistent with the drawings. At page 25, line 17 (paragraph 0117), "shown in FIG. 3" has been deleted. Further, the reference numeral for broadcasting receiving unit has been amended to 113, and the numeral for data processing/displaying unit has been amended to 114. The foregoing amendments are supported by the original specification and drawings, and therefore do not add new matter. Applicants respectfully submit that the foregoing amendments resolve all the discrepancies.

Discussion of Claim Objections

The Examiner objected to Claims 1, 7, and 10 as including informalities. As above, Claims 1, 7 and 10 have been cancelled, and therefore the claim objections are now moot.

Discussion of Rejection Under 35 U.S.C. § 112

Claims 1-19 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1-19 have been cancelled, and therefore the rejection is now moot. Applicants submit that new Claims 21-40 are definite.

Discussion of Rejection Under 35 U.S.C. § 101

Claims 1-20 have been rejected under 35 U.S.C. § 101. The Examiner asserted that Claims 1-13 are not patentable subject matter because they involve abstract ideas (prompting and discriminating, etc.) without a tangible, real-world output.” The Examiner further asserted that Claims 14-20 are non statutory subject matter because they are software implementations with functions for prompting and discriminating. Applicants respectfully disagree with the Examiner. However, given that Claims 1-20 have been cancelled, the rejection is moot.

New Claims 21-34 are directed to method of receiving multicast data. Claims 21-34 are defined in terms of actions of user terminals that are to receive multicast data originated from a content providing server. New Claims 35-40 are directed to method of relaying multicast data from a content providing server to a terminal connected to a DSL network and are further defined using physical components relating to the actions. Claims 35-40 are defined in terms of actions of a multicast box that is to relay data between the content providing server and user terminals and are further defined using physical components relating to the actions. These methods are particularly useful in multicasting of multimedia data such as news contents. As these claims define new and useful process (method), Applicants respectfully submit that Claims 21-40 are directed to patentable subject matter under 35 U.S.C. § 101.

Discussion of Rejection Under 35 U.S.C. §§ 102 and 103

The Examiner rejected Claims 1, 2, 3, 4, 8, 13, 14, 15, 16 and 20 under 35 U.S.C. § 102(b) as being anticipated by Nurenberg et al. (US 6,181,697 B1) (hereinafter “Nurenberg”). The

Examiner rejected Claims 7 under 35 U.S.C. § 103 (a) as being unpatentable over Nurenberg in view of the Plummer publication of Internet Broadcasting protocols. The Examiner also rejected Claims 9 and 10 under 35 U.S.C. § 103 (a) as being unpatentable over Nurenberg in view of Internet Broadcast Protocol, Unix man pages: rsh (1) and Multicast over TCP/IP HOW TO.

Applicants respectfully disagree with the Examiner. However, as Claims 1-20 have been cancelled, these rejections are moot. Applicants respectfully request the withdrawal of this rejection.

Patentability of New Claims

Applicants would like to discuss patentability of new Claims 21-40 over the references relied on in the Office Action.

The Law of Anticipation

Anticipation under Section 102 can be found only if a reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775 (Fed. Cir. 1985). More particularly, a finding of anticipation requires the disclosure in a single piece of prior art of each and every limitation of a claimed invention. *Electro Med. Sys. S.A. v. Cooper Life Sciences*, 34 F.3d 1048, 1052 (Fed. Cir. 1994).

Standard for Obviousness

The Patent and Trademark Office has the burden under section 103 to establish a *prima facie* case of obviousness. *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-87 (Fed. Cir. 1984). To establish a *prima facie* case of obviousness, three basic criteria may be met: first, the prior art reference (or references when combined) may teach or suggest all the claim limitations; second, there may be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; finally, there may be a reasonable expectation of success. See M.P.E.P. § 2143.

Disclosure of Cited References

Nurenberg discloses a method for a unicast endpoint client to access a multicast internet protocol session, and to serve as a re-distributor of such a session. Specifically, Nurenberg discloses a Multicast-Unicast Server (MUS) that essentially acts as a middleman between a unicast

endpoint client and a multicast session data source. *See Nurenberg*, col. 3, line 66 through col. 4, line 11 (“[MUS] function as gateways”). The MUS, via its Session Description Protocol (SDP), listens for multicast sessions that are available on the multicast network, and maintains a list of those sessions in its Sessions Database. *Nurenberg*, col. 4, line 66 through col. 5, line 6; FIG. 2. The unicast endpoint client must then connect to the MUS’ http server to view available multicast sessions and select a desired one. *Nurenberg*, col. 6, line 61 through col. 7, line 4. Once it has selected a desired session, the client checks its own Multicast interfaces to see if packets from that session are present on any sub-network to which it is attached. *Nurenberg*, col. 7, lines 7-10. If such packets are not present, the client connects to an alternate socket of the MUS, and the MUS converts the address of the multicast IP packets of the requested-for session to the unicast address of the client. *Nurenberg*, col. 7, lines 21- 34. The Multicast-Unicast Servers (MUS) collect and maintain a list of all the multicast sessions available on the multicast network. Clients on the unicast networks desiring to receive data from the multicast sessions must connect to the MUS, and select what multicast session data they desire to receive *from the list maintained by the MUS*.

Internet Broadcasting protocols is cited by the Examiner to provide the general concept of transmitting data by broadcasting. See Office Action at page 23.

Unix man pages: rsh (1) is cited to provided the general concept of using rsh to send a command to a computer device. See Office Action at page 24.

Multicast over TCP/IP HOW TO is cited to provided the general concept of determining whether a device is multicast capable.

Claims 21 and 29

Claim 21 is directed to a method of receiving multicast data. The method of Claim 21 includes the features of: connecting, by a user terminal, to a content providing server via a DSL network connected to the Internet, wherein the DSL network comprises a local DSL device, which links between the Internet and the user terminal; requesting, by the user terminal, a desired content from to the content providing server; communicating, by the user terminal, with a multicast box associated wit the local DSL device and configured to relay data for the desired content from the content providing server to the user terminal; and receiving, by the user terminal, the data from the multicast box or the local DSL device.

Claim 29 is directed to a method of receiving multicast data. The method of Claim 29

includes the features of connecting, by a user terminal, to a content providing server via a DSL network connected to the Internet, wherein the DSL network comprises a local DSL device, which links between the Internet and the user terminal; requesting, by the user terminal, a desired content to the content providing server; communicating, by the user terminal, with a multicast box associated with the local DSL device and configured to relay data for the desired content from the content providing server to other computers; determining, by the user terminal, whether the data is available for multicasting at the local DSL device; and receiving, by the user terminal, the data from the local DSL device or the multicast box.

Nurenberg does not teach the features of Claim 21 or 29. Instead, Nurenberg discloses a method where a user in a unicast network connects to Multicast-Unicast Server (MUS), and selects/requests the desired session from the list maintained by the MUS. A user in Nurenberg neither connects nor requests to the content providing server for a desired content to receive the content from a local DSL device or the multicast box connected to the local DSL device. As such, Nurenberg does not anticipate Claim 21 or 29.

Further, the other references cited by the Examiner do not teach any of these features lacking in Nurenberg. As such, the combination of Nurenberg with the other references would not provide all the claimed features of Claim 21 or 29. Thus, no *prima facie* obviousness can be established. Applicants respectfully submit that Claims 21 and 29 are individually patentable over Nurenberg, Internet Broadcast Protocol, Unix man pages: rsh (1) and Multicast over TCP/IP HOW TO, alone or in combination.

Claim 35

Claim 35 is directed to a method of relaying multicast data from a content providing server to a terminal connected to a DSL network. The method includes the features of: providing a multicast box that is associated with a local DSL device, which links between the Internet and a plurality of user terminals comprising a first user terminal and a second user terminal; receiving, by the multicast box, data for a content from a content providing server, wherein the data is for a content selected by the first user terminal; communicating, by the multicast box, with the first user terminal to verify whether the local DSL device supports multicasting; and transmitting, by the multicast box, the data to the first user terminal.

Nurenberg does not teach the features of Claim 35. Nurenberg's MUS does not perform

a similar function. Nurenberg's MUS is used only in a unicast IP network (*see* Figure 1 of Nurenberg), and therefore Nurenberg's MUS does not need to verify whether the local DSL device supports multicasting. As such, Nurenberg does not anticipate Claim 35.

Further, the other references cited by the Examiner do not teach any of these features lacking in Nurenberg. As such, the combination of Nurenberg with the other references would not provide all the claimed features of Claim 35. Thus, no *prima facie* obviousness can be established. Applicants respectfully submit that Claim 35 is patentable over Nurenberg, Internet Broadcast Protocol, Unix man pages: rsh (1) and Multicast over TCP/IP HOW TO, alone or in combination.

Dependent Claims

Although Applicants have not addressed all the issues of the dependent claims, Applicants respectfully submit that Applicants do not necessarily agree with the characterization and assessments of the dependent claims made by the Examiner, and Applicants believe that each claim is patentable on its own merits. Claims 22-28, 30-34, and 35-40 are dependent either directly or indirectly on one of the above-discussed independent Claims 21, 29, and 35. Applicants respectfully submit that pursuant to 35 U.S.C. § 112, ¶4, the dependent claims incorporate by reference all the limitations of the claim to which they refer and include their own patentable features, and are therefore in condition for allowance. Therefore, Applicants respectfully request the withdrawal of all claim rejections and prompts allowance of the claims.

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CONCLUSION

Applicants have endeavored to address all of the Examiner's concerns as expressed in the outstanding Office Action. Accordingly, arguments in support of the patentability of the pending claim set are presented above.


In light of the above remarks, reconsideration and withdrawal of the outstanding rejections is respectfully requested. If the Examiner has any questions which may be answered by telephone, he is invited to call the undersigned directly.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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